

ABSTRACT OF THE DISCLOSURE (Amended)

Method of identification and quantitative analysis of carboxylic [acid(s)] acids in a sample by mass spectrometry using stable isotope labeled internal standards is provided. [Said] The internal standards [is] are prepared by reaction of an authentic sample of [said] the carboxylic acids with a stable isotope labeled reagent, and is added to a sample containing [said] the carboxylic acids. [Said] The carboxylic acids in [said] the sample [is] are then quantitatively converted to [a] chemical compounds of identical structure, except the stable isotope atoms, as [that] those of [said] the stable isotope labeled internal standards using a non-labeled reagent. [Said] The sample is then extracted and the extract is analyzed by mass spectrometry. Identification and quantification of [said] the carboxylic acids in the sample are made from a plot of ion ratio of [said] the converted [carboxylic acid] chemical compounds to [said] the stable isotope labeled internal standards versus carboxylic acid concentration.